

CLAIMS

1. A recording method of recording data to an information recording medium, the information recording medium having a recording area for storing data and stored data which is managed by a file system, wherein

the recording area of the information recording medium is managed in block units, and each block includes a specified number of clusters as units for storing data for the file system,
10 and

the data recording method comprises, when necessary to record data in a new free area,

searching for a block which has a specified threshold number or more of unused clusters, and

15 writing the data in the searched block prior to the other block.

2. The recording method according to claim 1, wherein when necessary to record data to a new free area, the data are written in unused clusters in a valid block which has been searched.
20

3. The recording method according to claim 2, further comprising

counting the unused clusters contained in each block in the recording area,
25

determining the valid block on the basis of the counting result,

generating and holding a valid free area list which is list information related to the valid block, and

30 searching for the valid block by referring to the valid free area list at data recording process.

4. The recording method according to claim 1, wherein

information about the threshold is stored in the information recording medium.

5. The recording method according to claim 1, wherein
5 the threshold is a value of 1/2 or more of the number of clusters included in one block.

6. A data processing apparatus for writing or reading
data to or from an information recording medium, wherein
10 a recording area of the information recording medium is managed in block units, and each block includes a specified number of clusters, the cluster is unit for storing data for a file system,

the data processing apparatus comprises:
15 an I/O processing section that processes input and output of information for the information recording medium;
a file system controller that manages data stored in the information recording medium, as a file;
a data processor that controls writing and
20 reading of data to and from the information recording medium;
and

a valid free area manager that holds information
for a block containing a specified threshold number or more of
unused clusters in an area of the information recording medium,
25 and

when necessary to record data to a new free
area, the data processor, as a control, searches for a block
containing a specified threshold number or more of unused clusters
with reference to the information held in the valid free area
30 manager, and writes data to the searched block prior to the other
block.

7. The data processing apparatus of claim 6, wherein

the valid free area manager holds a valid free area list which is list information related to a valid block which is a block including a specific number or more of unused clusters.

5 8. The data processing apparatus of claim 6, wherein information about the threshold is stored in the information recording medium.

9. The data processing apparatus of claim 6, wherein
10 the threshold is a value of $1/2$ or more of the number of clusters included in one block.